

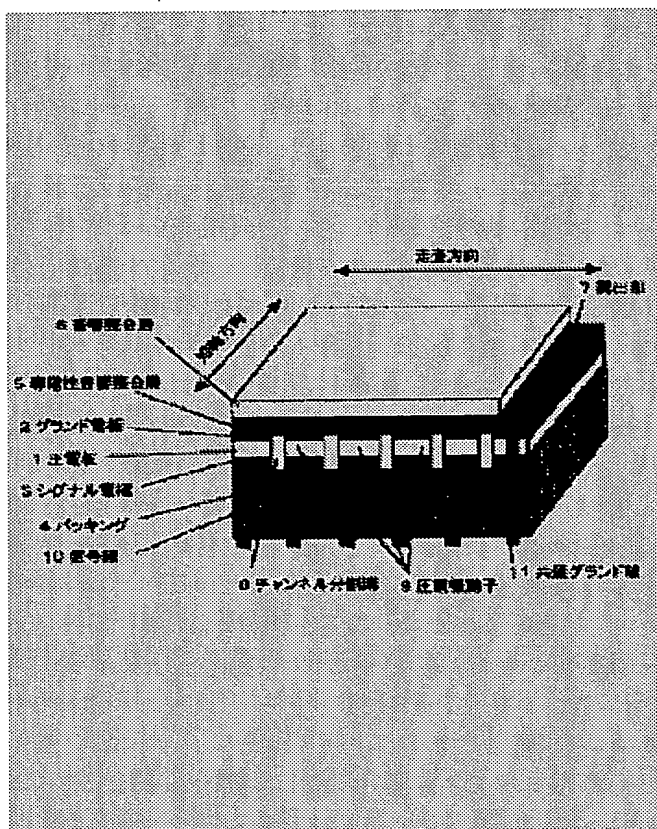
## ULTRASONIC PROBE

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### Abstract of JP11347032

**PROBLEM TO BE SOLVED:** To increase operability, bearing resolving power in a short distance, and penetration in a long distance of the ultrasonic probe by narrowing a piezoelectric plate in the minor axis direction. **SOLUTION:** The take-out port of a ground electrode 2, which is formed at the ultrasonic wave radiation side of a piezoelectric plate 1 of this ultrasonic probe, is disposed at an exposed part 7 of the end side in the scanning direction, and the take-out port is connected to the outside using a common ground line 11. As the effective opening width in the minor axis direction is the same as the width of the piezoelectric plate 1 in the monitor axis direction, the width of the ultrasonic probe can be reduced in the minor axis direction, resulting in improved operability. As, with the same width of a piezoelectric oscillator, the effective opening width in the minor axis direction of ultrasonic wave radiated from the piezoelectric plate 1 becomes larger, even when used for scanning from narrow gaps such as intercostal scanning, a good ultrasonic tomograph is obtained in which reflection noise signal is reduced from the rib. The ground electrode 2 of the piezoelectric oscillator is divided in the minor axis direction and they are selected by a switch, so the effective opening width in the minor axis direction can be varied to form a suitable beam corresponding to an area to be measured, resulting in improving the bearing resolving power in a short distance as well as the penetration in a long distance.



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